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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,718

06/12/2006

Daisuke Kumaki

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COOK ALEX LTD

SUITE 2850

200 WEST ADAMS STREET

CHICAGO, IL 60606

EXAMINER

CAO, PHAT X

ART UNIT

PAPER NUMBER

2814

MAIL DATE

DELIVERY MODE

01/06/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,718	Applicant(s) KUMAKI ET AL.	
	Examiner Phat X. Cao	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 3-5,8-11,14,16 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7,12,13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/12/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's election of Group I (claims 1-2, 6-7, 12-13, and 15) in the reply filed on 10/01/08 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

2. Claim 6 is objected to because of the following informalities: lines 10-11, "a forth substance" should be changed to "a fourth substance". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 6-7, 12-13, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Liao et al (US 6,717,358).

Regarding claim 1, Liao (Figs. 1 and 2) discloses a light emitting device comprising: a first electrode (140), a laminated body including a layer (120.N) containing a light emitting substance (Nth EL UNIT) in contact with the first electrode (140), a layer (133) having an acceptor level (P-type doped organic layer) in contact with the laminated body (120.N), a layer (131) having a donor level (N-type doped organic layer)

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in contact with the layer (133) having the acceptor level, and a second electrode (110) in contact with the layer (131) having the donor level.

Regarding claim 6, Liao (Figs. 1 and 2) discloses a light emitting device comprising: a first electrode (140), a laminated body including a layer (120.N) containing a light emitting substance (Nth EL UNIT) in contact with the first electrode (140), a first layer (133) containing a first substance (P-type doped organic layer) of which a hole mobility is higher than an electron mobility and a second substance that can accept an electron from the first substance (column 7, lines 25-30) in contact with the laminated body (120. N), a second layer (131) containing a third substance (N-type doped organic layer) of which an electron mobility is higher than a hole mobility and a fourth substance that can donate an electron to the third substance (column 7, lines 20-25) in contact with the first layer (133), and a second electrode (110) in contact with the second layer (131).

Regarding claims 2 and 7, Liao (Fig. 2) further discloses that the second layer (131) having the donor level includes tris(8-quinolinolato) aluminum (abbreviation : Alq3) (column 7, lines 45-51)

Regarding claims 12-13 and 15, Liao (Fig. 2) also discloses that the laminated body (120.N) has a single layer structure, and when a potential of the second electrode 110 (anode) is set higher than a potential of the first electrode 140 (cathode), a hole generated in the layer (133) having the acceptor level is injected in the laminated body (120.N) because of the hole transporting from anode to cathode.

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-2, 6-7, 12-13, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsumoto et al (US 2005/0098207).

Regarding claim 1, Matsumoto (Fig. 23) discloses a light emitting device comprising: a first electrode (95), a laminated body including a layer (94) containing a light emitting substance (light emission layer) in contact with the first electrode (95), a layer (93,99) having an acceptor level (hole transporting section) in contact with the laminated body (94), a layer (100) having a donor level (electron transporting section) in contact with the layer (93,99) having the acceptor level, and a second electrode (91) in contact with the layer (100) having the donor level.

Regarding claim 6, Matsumoto (Fig. 23) discloses a light emitting device comprising: a first electrode (95), a laminated body including a layer (94) containing a light emitting substance (light emission layer) in contact with the first electrode (95), a first layer (93,99) containing a first substance (hole transporting section) of which a hole mobility is higher than an electron mobility and a second substance that can accept an electron from the first substance (par. [0109], lines 7-11) in contact with the laminated body (94), a second layer (100) containing a third substance (electron transporting

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section) of which an electron mobility is higher than a hole mobility and a fourth substance that can donate an electron to the third substance (pars. [0091] - [0093]) in contact with the first layer (93,99), and a second electrode (91) in contact with the second layer (100).

Regarding claims 2 and 7, Matsumoto (Fig. 23) further discloses that the second layer (100) having the donor level includes tris(8-quinolinolato) aluminum (abbreviation :Alq3) (pars. [0091] – [0092])

Regarding claims 12-13 and 15, Matsumoto (Fig. 23) also discloses that the laminated body (94) has a single layer structure, and when a potential of the second electrode 91 (anode) is set higher than a potential of the first electrode 95 (cathode), a hole generated in the layer (99) having the acceptor level is injected in the laminated body (94) because of the hole transporting from anode to cathode.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phat X. Cao whose telephone number is (571)272-1703. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571)272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. X. C./
Primary Examiner, Art Unit 2814

/Phat X. Cao/
Primary Examiner, Art Unit 2814